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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/498,234 | 02/03/2000 | Jason Raymond Baumgartner | AUS990879US1 | 8528 |

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EXAMINER

ARMSTRONG, ANGELA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2654 | 10 |

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/498,234

Applicant(s)

BAUMGARTNER ET AL.

Examiner .

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 4-6, 15, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (US Patent No. 5,199,077) in view of Melih et al, "Audio Retrieval Using Perceptually Based Structures," 1998, Proceedings of the IEEE International Conference on Multimedia Computing and Systems, 28 June-1 July 1998, Pages:338 - 347, in further view of Lee (US Patent No. 6,067,520).
2. Regarding claims 1-2, 4-6, 15, and 18-21, Wilcox teaches a technique for wordspotting intended for interactive applications, such as editing of mixed media documents and keyword indexing in audio or video recordings (Figure 15), which reads on "a system for locating an audio segment within a storage device." Additionally, at col. 11, lines 3-5, Wilcox teaches the user inputs the word or phrase to be searched, which reads on "an input device suitable for transmitting an input sample indicative of an audio segment.

Wilcox does not specifically teach that the input is a text sample. However, allowing a user to search for data via entering text keywords was well known in the art.

In a similar field of endeavor, Melih teaches methods and apparatus for retrieving audio information using content and information. Specifically, at section 2, entitled Audio Retrieval,

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pages 338-340, Melih teaches the system allows a query search to retrieve information responsive to a textual query and suggests that a textual based query is useful when specifying broad search categories (see page 339, second column, second paragraph).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Wilcox to allow for textual input for query searching, as taught by Melih, for the purpose of providing system searching capabilities via broad search categories, as suggested by Melih.

Wilcox does not specifically teach implementation of a media player for playing audio stored on the storage device. However, utilizing a media player for playing stored audio was well known in the art.

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to implement a media player for playing stored audio as was well known in the art, for the purpose of playing edited audio to confirm or verify the selected audio has been edited to the user's satisfaction.

At col. 7, lines 31-65, Wilcox teaches that the received input speech is digitized and feature extraction is performed and a Hidden Markov Model (HMM) for the keyword to be spotted is created, which reads on "a sample converter configured to generate an input sample" and "digital representation."

Wilcox does not teach the representation of the converter is a diphthong sequence. However, implementation of diphthong sequences in a HMM recognition algorithm was well known in the art.

In a similar field of endeavor, Lee teaches a system and method of recognizing speech using Hidden Markov Models, which processes sequences of monosyllables as the acoustic units for recognition (abstract, col. 4, lines 20-26; col. 6, line 37-42; col. 16, lines 23-27).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the system of word spotting system of Wilcox to implement monosyllables as the acoustic units of recognition as taught by Lee, for the purpose of improving recognition results, as suggested by Lee (col. 6, lines 50-54).

3. At col. 8, lines 64-65, Wilcox teaches that feature vectors are computed for the input speech in which the keyword is to be spotted, which reads on “an audio converter configured to generate an audio content comprising a digital representation.”

At Figure 4, Wilcox teaches implementation of the wordspotter search, which reads on “a comparator.”

Wilcox teaches the word spotting system includes a computer, which reads on “input device comprises a keyboard”, since a keyboard a component of a computer system.

Wilcox teaches implementation of microphones and voice recordings at Figure 15, element 88 and 87.

Additionally, Wilcox teaches providing an indication of the location of the portion of interest at col. 10, lines 10-11, transforming data to a frequency domain representation at col. 7, lines 58-65; col. 8, line 65 continuing to col. 9, line 3, and implementation of the keyword spotting system with word processed documents at col. 11, lines 20-25.

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4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (US Patent No. 5,199,077) in view of Melih et al and Lee (US Patent No. 6,067,520) as applied to claim 1 above, and further in view of well known prior art.

5. Regarding claim 7, Wilcox and Lee teach everything as claimed in claim 1. However, Wilcox and Lee do not specifically teach that the storage medium comprises a compact disc. However, storing audio recordings on a compact disc was well known.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Wilcox, to allow for the audio recordings to be stored on compact disc as was well known in the art, for the purpose of allowing for more data to be stored and processed.

Regarding claim 8, Wilcox and Lee teach everything as claimed in claim 1. However, Wilcox and Lee do not specifically teach that the storage medium comprises a digital video disc. However, storing recordings on a digital video disc was well known.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Wilcox, to allow for the audio recordings to be stored on a digital video disc as was well known in the art, for the purpose of allowing for more data to be stored and processed from audio data that is associated with video.

Response to Arguments

6. Applicant's arguments with respect to claims 1-12 and 14-21 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A. Armstrong
Examiner
Art Unit 2654

AAA
March 22, 2004

Angela Armstrong